

Appln. Serial No. 09/473,726
Amendment Dated December 8, 2009
Reply to Office Action Mailed September 8, 2009

AMENDMENTS TO THE SPECIFICATION

Please amend the Specification as follows:

Amend the paragraph beginning on page 1, line 10, as follows:

A recent development in the communications field has been the introduction of networks providing voice over IP (VoIP) and voice over ATM services. The advantage to users is the significant reduction in costs, particularly for calls set up over long distances which can often be billed at local call rates. In such networks, a first PTT/ATN network interfaces with a managed IP network via one or more media gateways, which gateways are managed by media gateway controllers.

Amend the paragraph beginning on page 2, at line 9, as follows:

An industry standard for the second requirement (b) is also nearing acceptance. While there are many device control protocols (SGCP or Simple Gateway Control Protocol, IPDC or Internet Protocol Device Control, MGCP or Media Gateway Control Protocol, MEGACO, and, of course, some proprietary ones, vendor interoperability between media gateway controllers and media gateways is generally achievable).

Amend the paragraph beginning on page 2, at line 14, as follows:

The third requirement (c) is however a much more difficult issue. A number of options have been tentatively proposed, but none of these has provided a satisfactory solution. One such proposal is the extension of ISUP to carry bearer information. This is referred to as ISUP+, or Q.BIC. Current proposals suggest the use of CCS7 (Common Channel Signaling System 7) network for carriage of this information, but many service providers do not want to involve a CCS7 network in their Voice over Packet network design. Another proposed solution is that of changing the session initiation protocol SIP(RFC 2543) to allow carriage of both SDP or Session Description Protocol (RFC 2327) and CCS7 user part information to allow PSTN interconnect and transparency, and using this information as the media gateway controller to media gateway controller (MGC to MGC) communication protocol. This is typically referred to as SIP BCP T (SIP Best Common Practices for Telephony). While this effort is currently under active consideration, a ratified, working protocol has yet to be defined. A third proposal is the use of a

vendor specific protocol. While this is a working solution, it is a vendor specific one, and includes information specific to the vendor specific implementation ~~of the ICE half-call split~~. This information will of course be proprietary and not generally available to other vendors.

Amend the paragraph on page 3, line 20, as follows:

According to a first aspect of the invention, there is provided a communications network arrangement providing voice over IP or voice over ATM services, the network arrangement comprising: a first media gateway controller controlling a first gateway, where the first media gateway controller is[[and]] provided with a first operating protocol, a second media gateway controller controlling a second gateway, where the second media gateway controller is[[and]] provided with a second operating protocol, and a gateway address translator incorporating proxies for said first and second gateways respectively, wherein said gateway address translator provides a relay function for messaging between each said media gateway controller and its corresponding gateway, and a virtual bearer function for messaging between said media gateway controllers.

Amend the paragraph beginning on page 4, line 4, as follows:

According to another aspect of the invention, there is provided a method of providing voice over IP or voice over ATM services in a communications network arrangement comprising: a first media gateway controller controlling a first gateway ~~and provided with a first operating protocol~~, and a second media gateway controller controlling a second gateway, where the first media gateway controller is provided with a first operating protocol, and the second media gateway controller is[[and]] provided with a second operating protocol, the method comprising provisioning proxies of said gateways so as to provide a relay function for messaging between each said media gateway controller and its corresponding gateway, said messaging utilising the protocol of the controller and the gateway, and a virtual bearer function for enabling messaging between said media gateway controllers.

Amend the paragraph beginning on page 4, line 15, as follows:

According to another aspect of the invention, there is provided a gateway address translator for use in a communications network arrangement providing voice over IP or voice over ATM services and comprising: a first media gateway controller controlling a first gateway ~~and provided with a first operating protocol, and~~ a second media gateway controller controlling a second gateway, where the first media gateway controller is provided with a first operating protocol, and the second media gateway controller is[[and]] provided with a second operating protocol, the gateway address translator comprising; gateway proxies, one for each said gateway, and virtual gateways, one for each said media gateway controller, wherein said gateway proxies provide a relay function for messaging between each said media gateway controller and its corresponding gateway, and wherein said virtual gateways provide a virtual bearer function for messaging between said media gateway controllers.